

AFFIDAVIT OF JAMES H. VANDER WEIDE

I, JAMES H. VANDER WEIDE, being duly sworn, depose and say that the foregoing rebuttal testimony is true and correct to the best of my knowledge and belief.

James H. Vander Weide

Subscribed and sworn to
before me this 29th day
of February, 1996.

Carol Allen
Notary Public

My Commission Expires Feb 17, 1998

**Calculation of the Price Cap LECs'
Economic Return on Investment
1991-1994**

	<u>Average 1991-1994</u>
Average Cost of Debt	8.32
Average Debt Ratio	41.01
Economic Return on Equity	9.36
Average Equity Ratio	58.99
 Price Cap LECs' Economic Return on Investment ¹	 8.94

Notes:

- The cost of debt is the average of each month's Moody's A-rated Public Utility Bond yield during the period.
- Average debt and equity ratios are calculated from the debt and equity data in the ARMIS 43-02 filings for the price cap LECs.

¹ The price cap LECs' economic rate on investment is the weighted average of its cost of debt and its economic rate of return on equity; for example, the economic return on investment during the period 1991 – 1994 = $(.4101 * 8.32) + (.5899 * 9.36) = 8.94\%$.

**Calculation of the Price Cap LECs'
Economic Rate of Return on Equity
1991 – 1994**

$$V_0 = \frac{C_1}{1+k} + \frac{C_2}{(1+k)^2} + \frac{C_3}{(1+k)^3} + \frac{C_4+V_4}{(1+k)^4}$$

Where (\$ in thousands):

k	=	Economic Rate of Return on Equity
V ₀	=	132,901,227
C ₁	=	9,059,449
C ₂	=	9,477,073
C ₃	=	9,764,158
C ₄	=	10,208,090
V ₁	=	146,039,036

Economic Rate of Return on Equity = 9.36%

Notes:

- The current value of the embedded plant is calculated using Bureau of Economic Analysis investment price indexes. The source for this data is Attachment B, "Total Factor Productivity Review Plan," Schedule CAP1, Page 1 of 3, line 530. This attachment was filed with the *Comments of the United States Telephone Association on Fourth Further Notice of Proposed Rulemaking*.
- The value of V₀ was calculated by multiplying the current value of the price cap LECs' plant at the end of 1990 by the equity percent at the end of 1990.
- The value of V₄ was calculated by multiplying the current value of the price cap LECs' plant at the end of 1994 by the equity percent at the end of 1994.
- The values of C₁, C₂, C₃, and C₄ are the dividends paid by the price cap LECs in 1991, 1992, 1993, and 1994, respectively.

**QUALIFICATIONS OF
DR. JAMES H. VANDER WEIDE**

James H. Vander Weide is Research Professor of Finance and Economics at the Fuqua School of Business, Duke University. Dr. Vander Weide is also founder and President of Financial Strategy Associates, a consulting firm that provides strategic, financial, and economic consulting services, including cost of capital studies. He has testified on the cost of capital, risk, incentive regulation, pricing, depreciation, accounting, and other financial and economic issues before the U.S. Congress, the Federal Communications Commission, the National Telecommunications and Information Administration, the Federal Energy Regulatory Commission, the public service commissions of 30 states, and the insurance commissions of five states. He has also engaged in special research projects and designed financial software packages for firms in the banking, electric, gas, insurance, telephone, and water industries.

Educational Background and Prior Academic Experience

Dr. Vander Weide holds a Ph.D. in finance from Northwestern University and a B.A. from Cornell University. In January 1972, he joined the faculty of the School of Business at Duke University and was subsequently named Assistant Professor, Associate Professor, and then Professor. In 1982, he assumed the position of Associate Dean of Faculty Affairs at the Fuqua School. He resigned this position in July 1983 and is now Research Professor of Finance and Economics.

Since joining the faculty at Duke University, Dr. Vander Weide has taught courses in corporate finance, investment management, and management of financial institutions. He has also taught courses in statistics, economics, and operations research, and a Ph.D. seminar on the theory of public utility pricing.

In addition to his teaching in the full-time educational programs of the Fuqua School of Business, he has been active in executive education at Duke. Dr. Vander Weide helped design the Duke Advanced Management Program at the Fuqua School of Business and served as Program Director for this program for five years. Dr. Vander Weide now serves as Program Director and/or teacher in many executive programs designed to prepare managers for the competitive environment in American industry. In 1989, Dr. Vander Weide designed and initiated a three-week executive program for Soviet manager development, the first executive program in the United States designed exclusively for Soviet managers. The program continues for managers from the former Soviet republics since the breakup of the Soviet Union. He continues to deliver a nationally prominent program on the Cost of Capital for firms in regulated industries.

Publications

Dr. Vander Weide has written a book entitled *Managing Corporate Liquidity: An Introduction to Working Capital Management* for John Wiley and Sons, Inc., which was published in August, 1984. He has also written a chapter on "Financial Management in the Short Run" for *The Handbook of Modern Finance*, and written research papers on such topics as portfolio management, capital budgeting, investments, the effect of regulation on the performance of public utilities, and cash management. His articles have been published in *American Economic Review*, *Financial Management*, *Journal of Finance*, *Journal of Financial and Quantitative Analysis*, *Journal of Bank Research*, *Journal of Portfolio Management*, *Journal of Accounting Research*, *Journal of Cash Management*, *Management Science*, *Atlantic Economic Journal*, *Journal of Economics and Business*, and *Computers and Operations Research*.

Professional Consulting Experience

Dr. Vander Weide has provided financial and economic consulting services to firms in the electric, gas, insurance, telecommunications, and water industries for over 20 years. He also testified on the cost of capital, risk, incentive regulation, pricing, depreciation, accounting, and other financial and economic issues before the U.S. Congress, the Federal Communications Commission, the Federal Energy Regulatory Commission, the National Telecommunications and Information Administration, the public service commissions of thirty states, and the insurance commissions of five states. He worked for Bell Canada on a special task force to study the effects of vertical integration in the Canadian telephone industry.

Other Professional Experience

Dr. Vander Weide, in conjunction with his firm, has hosted a nationally prominent conference/workshop on determining the cost of capital where legal and financial executives from utilities and regulatory bodies have studied the strengths and weaknesses of the various approaches to estimating a company's cost of capital. In addition, he has conducted seminars and training sessions for executives in both regulated and unregulated industries on financial analysis, competitive strategy, financial strategy, capital budgeting, cost of capital, cash management, depreciation policies, and short-run financial planning.

In the 1970's, Dr. Vander Weide helped found University Analytics, Inc., one of the fastest growing small firms in the country. As an officer at University Analytics, he designed cash management models, databases, and software packages that are used by most major U. S. banks in consulting with their corporate clients. Having sold his interest in University Analytics, Dr. Vander Weide now concentrates on strategic and financial consulting, academic research, and executive education.